Storm Data and Unusual Weather Phenomena - August 2012

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details

LAKE MICHIGAN

PT WASHINGTON TO NORTH PT LT WI COUNTY --- 7.6 ESE NORTH POINT LTHOUSE [43.06, -87.78], 7.5 ESE NORTH POINT LTHOUSE [43.05, -87.79]

08/09/12 15:45 CST		0	Waterspout
08/09/12 15:50 CST		0	Source: Trained Spotter

National Weather Service volunteer observed brief waterspout just east of Bradford Beach, located just north of downtown Milwaukee.

Unstable conditions over Lake Michigan combined with nearby weak showers produced a water spout over Lake Michigan, visible from downtown Milwaukee. The waterspout was brief and only lasted an estimated 5 minutes.

SHEBOYGAN TO PT WASHINGTON WI COUNTY --- 1.3 E SHEBOYGAN [43.75, -87.69]

08/10/12 11:00 CST	2	0	Marine Strong Wind (MG 36 kt)
08/10/12 12:00 CST		0	Source: C-MAN Station

Sustained winds of 32 knots gusting to 34-36 knots caused high waves on the Sheboygan harbor break wall.

Direct Fatalities: M37IW, M21IW

A tight pressure gradient over Lake Michigan due to strengthening low pressure moving through the Ohio Valley and central Great Lakes was responsible for gusty northeast winds and resultant high waves at Sheboygan Harbor. Wave heights reached as high as 14 feet at the southern Lake Michigan buoy. Winds gusted as high as 36 knots at the Sheboygan C-Man station in the early afternoon on August 10th. The two victims were swept into Lake Michigan by high waves crashing onto the Sheboygan harbor north break wall. The two were trying to recover fishing equipment which had fallen into the lake the day before. A third person was also washed into the lake by the high waves, but survived due to holding onto a nearby ladder. The first victim's body was located the next day, Saturday, August 11th. The second victim was found the following day, on Sunday, August 12th.

PT WASHINGTON TO NORTH PT LT WI COUNTY --- 1.0 SW PORT WASHINGTON [43.37, -87.88]

08/19/12 15:32 CST		0	Marine Hail (0.88 in)
08/19/12 15:32 CST		0	Source: Trained Spotter

Nickel size hail observed by trained spotter just southwest of downtown Port Washington.

PT WASHINGTON TO NORTH PT LT WI COUNTY --- 2.9 E MEQUON [43.22, -87.92]

08/19/12 16:36 CST		0	Marine Thunderstorm Wind (EG 39 kt)
08/19/12 16:36 CST		0	Source: Trained Spotter

Trained spotter observed estimated 39 knot winds and one half inch hail at the intersection of Mequon Road and Interstate 43.

Strong thunderstorms formed along the lake breeze and affected the coastal and near shore areas of Lake Michigan, producing gusty winds and large hail.

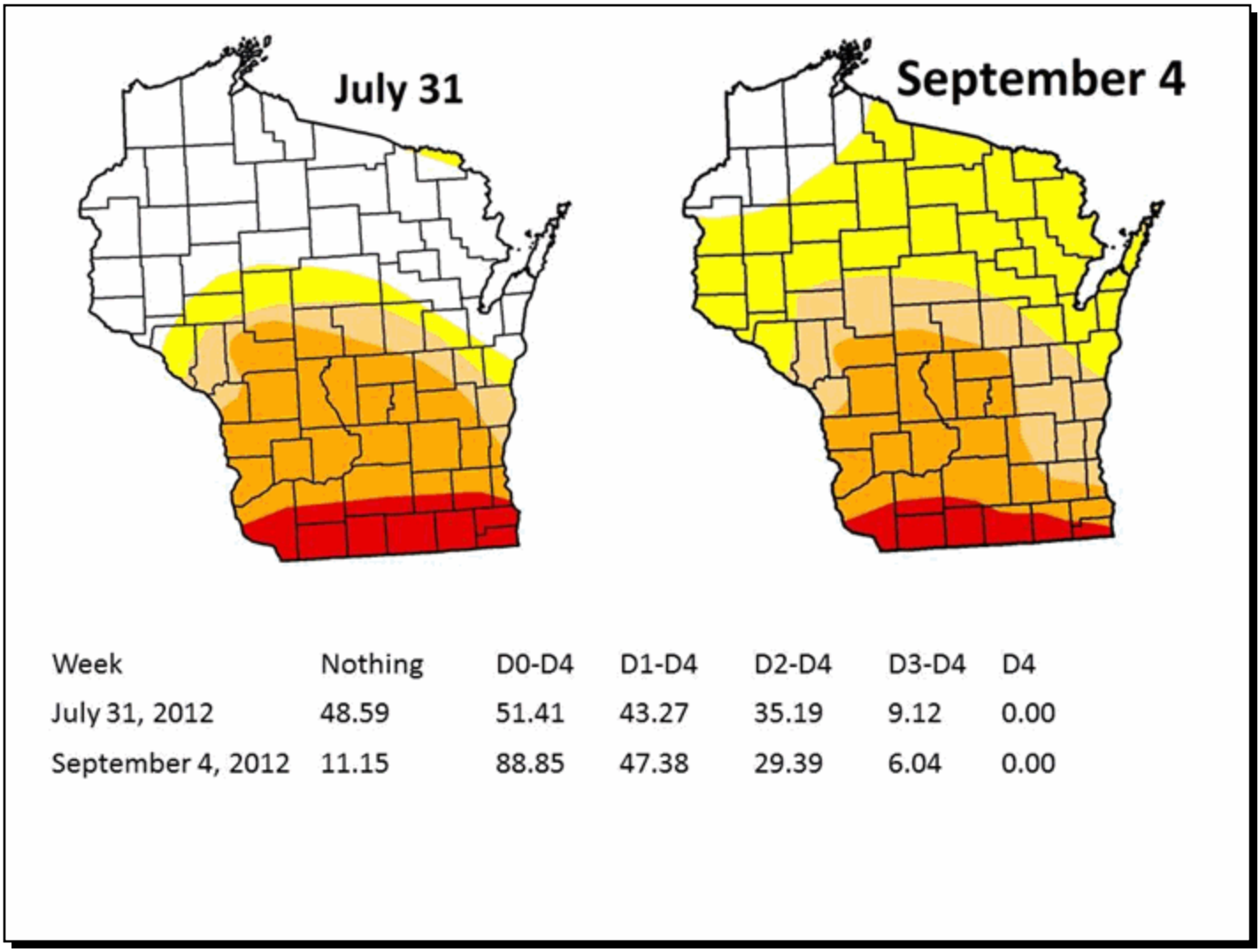
WISCONSIN, Southeast

(WI-Z046) MARQUETTE, (WI-Z047) GREEN LAKE, (WI-Z051) FOND DU LAC, (WI-Z052) SHEBOYGAN, (WI-Z056) SAUK, (WI-Z057) COLUMBIA, (WI-Z058) DODGE, (WI-Z059) WASHINGTON, (WI-Z060) OZAUKEE, (WI-Z062) IOWA, (WI-Z063) DANE, (WI-Z064) JEFFERSON, (WI-Z065) WAUKESHA, (WI-Z066) MILWAUKEE, (WI-Z067) LAFAYETTE, (WI-Z068) GREEN, (WI-Z069) ROCK, (WI-Z070) WALWORTH, (WI-Z071) RACINE, (WI-Z072) KENOSHA

08/01/12 00:00 CST		0	Drought
08/31/12 23:59 CST		0	

The extremely dry conditions continued through August across southern Wisconsin. Several widely-spaced rounds of showers and thunderstorms brought between 1.5 and 3 inches of rain to southern Wisconsin for the month, but monthly deficits ranged from 1.2 inch to 2.7 inches. This increased the yearly precipitation deficits to between 4 and 8 inches. The extreme heat of the summer of 2012 was tempered a bit mid-month, with at, or slightly below normal temperatures between the 10th and the 20th. But the month ended with above normal temperatures that included 90-degree highs for a few days, increasing the damaging effects on already stressed crops and putting additional pressure on water supplies.

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details



Week	Nothing	D0-D4	D1-D4	D2-D4	D3-D4	D4
July 31, 2012	48.59	51.41	43.27	35.19	9.12	0.00
September 4, 2012	11.15	88.85	47.38	29.39	6.04	0.00

Progression of drought conditions across Wisconsin during August, 2012. Percentages of area covered by the different drought ratings are provided in the table. There was improvement over southern Wisconsin for the month, but drought conditions worsened over northern Wisconsin.

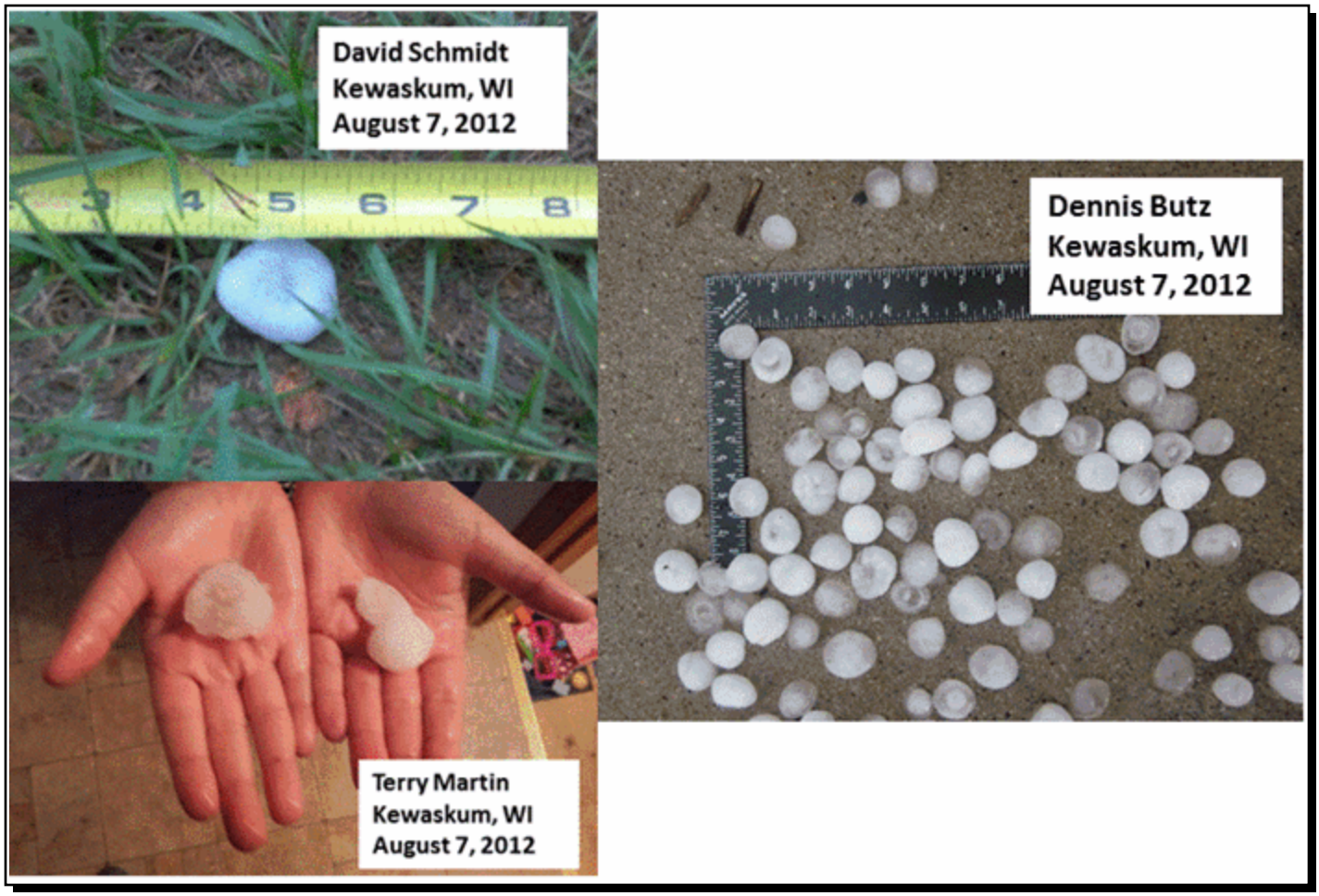
WASHINGTON COUNTY --- KEWASKUM [43.52, -88.22]

08/07/12 15:00 CST	2M	Hail (1.75 in)
08/07/12 15:05 CST	0	Source: Trained Spotter

A trained spotter reported large hail, between 1 1/4 inch and 1 1/2 inch in diameter that fell in Kewaskum. The 5-8 minute hail storm was the worst to hit Kewaskum in many years. Roughly 200 vehicles suffered damage from the hail, as well as many homes, condos, apartments and outdoor equipment. Hail damage to vehicles was about $250,000, and about $1.75 M to buildings and equipment. This information was supplied by local auto-body shops and insurance companies and is a broad estimate.

A cold front...moving into a hot, unstable air mass over southeastern Wisconsin produced scattered strong to severe thunderstorms during the late afternoon hours of August 7th. High temperatures rose to around 90 degrees, with dew point rising to the lower to middle 60s in eastern sections due to a lake breeze bringing in moisture off Lake Michigan. The lake breeze also enhanced low level convergence, aiding the overall forcing along the front for thunderstorm development. Surface-based CAPE values were between 2,000 and 3,000 J/kg, with steep mid-level lapse rates and sufficient bulk shear to support the sustained updrafts needed to produce large hail. The thunderstorms produced large hail up to 1.50 inch in diameter that damaged trees, vehicles, homes and outdoor equipment in Kewaskum in Washington County, with reports of smaller hail between 1/4 inch and 3/4 inch in Fond Du Lac and Dodge counties.

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details



Pictures of large hail stones that pelted the Kewaskum, WI area on August 7, 2012. The size of the largest hail stones reached 1.25 to 1.50 inches, however the duration of the hail ranged from 5 to 8 minutes. This hail storm was easily the the worst in many decades, and resulted in about $2 Million in property damage. As of late October, 2012, local body shops were still repairing vehicle damage.

MARQUETTE COUNTY --- WESTFIELD [43.88, -89.48]

08/16/12 02:12 CST	0	Thunderstorm Wind (EG 50 kt)
08/16/12 03:15 CST	0	Source: Law Enforcement

Law enforcement officials reported a tree down across a road in Westfield Township, blown down by thunderstorm wind gusts estimated up to 50 knots (58 mph). There were other nearby reports of large broken tree branches or knocked-over trees.

WAUKESHA COUNTY --- 3.0 SW BROOKFIELD [43.04, -88.19]

08/16/12 05:27 CST	0	Hail (0.88 in)
08/16/12 05:27 CST	0	Source: Trained Spotter

A trained spotter reported nickel-sized hail (0.88 inch in diameter) near the intersection of Interstate 94 and Moorland Road in Brookfield.

Thunderstorms developed over western Wisconsin ahead of a cold front, with isolated thunderstorms becoming severe as they moved into South Central Wisconsin. The storms strengthened as they moved into a region of increased instability, with most-unstable CAPE up to 1000 J/kg and moderate effective shear. The severe thunderstorms produced wind gusts up to 50 knots (58 mph) that downed trees in Marquette County, with strong thunderstorms producing nickel-sized hail near Brookfield in Waukesha County during the early morning hours of August 16th.

(WI-Z046) MARQUETTE, (WI-Z047) GREEN LAKE, (WI-Z051) FOND DU LAC, (WI-Z052) SHEBOYGAN, (WI-Z056) SAUK, (WI-Z057) COLUMBIA, (WI-Z058) DODGE, (WI-Z062) IOWA, (WI-Z063) DANE, (WI-Z064) JEFFERSON, (WI-Z067) LAFAYETTE, (WI-Z068) GREEN, (WI-Z069) ROCK, (WI-Z070) WALWORTH, (WI-Z072) KENOSHA

08/26/12 22:00 CST	0	Dense Fog
08/27/12 05:00 CST	0	

Storm Data and Unusual Weather Phenomena - August 2012

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details

An upper level trough of low pressure brought rain showers to southern Wisconsin during the morning and early afternoon hours of August 26th. The rain-moistened boundary layer cooled with the clearing of mid and high-level clouds associated with the upper-trough as it exited to the east of the region during the evening. Dense fog developed across southern Wisconsin during the late evening hours of August 26th, with widespread visibilities at or below 1/4 mile lingering through daybreak on August 27th.